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CAUSES OF "TURNOVER" AMONG COLLEGE FACULTIES

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When we look at the stupendous labor turnover in manufacturing establishments operating under traditional employment systems whose turnover is in some instances as high as 500 per cent a year, it would seem at first sight that an academic turnover of 40 per cent per annum is evidence of much better conditions in educational organizations than exist in industry. When we investigate the subject a little further, however, and reflect that the usual term of employment in colleges is for the academic year, and that all of the precedents and ethics of the profession are against changes during the academic year, we realize that the problem is a somewhat different one. We need also to bear in mind that the instructor in his relation to his students occupies a position analogous to that of a foreman or department head in industry, and that a change in faculty personnel of 40 per cent per annum finds its analogy in a change of foremen and department heads in industry of 40 per cent. The average cost of changing an employe in industry has been determined to range from \$50 to \$200, the subdivisions of this expense being:

- (a) Cost of hiring
- (b) Cost of teaching the new workman
- (c) Decreased production by the new workman
- (d) Work spoiled by the new employe

COST OF TURNOVER OF INSTRUCTORS ITEMIZED

It has been estimated that if we take into consideration municipal, state and federal appropriations and income from private endowments, as well as the money spent by the student himself, a fair cost for academic training is \$1.00 per recitation hour per student. Assuming that the average instructor handles twelve hours of work per week (most schedules being rather above than

below this figure), and that there are twenty-five students in each class, the average instructor would handle 300 student hours per week. Assuming that from thirty-three to thirty-four active weeks of work are done in the academic year, the expenditure from all sources for the instruction by the average instructor would represent a total outlay of approximately \$10,000 per annum. If an inexperienced instructor is only half as efficient during his first year as an experienced instructor, and assuming that the experienced instructor has 80 per cent efficiency, the net loss during the first year would be 40 per cent of \$10,000 or \$4,000 per instructor. In a faculty of 100 instructors with a turnover of 40 per cent per year, the total annual loss would be forty times \$4,000 or \$160,000 per annum of taxpayers' or parents' money. These figures take into account only the direct loss. The indirect loss is immeasurable since it represents the failure to develop potential economic and social efficiency in the student.

REASONS FOR CHANGE OF EDUCATIONAL WORK

The principal reasons for changing given by various men who have left educational work for other fields are as follows:

- 1. Insufficient pay
- 2. Insufficient opportunities for promotion
- 3. Their educational experience answered its purpose, namely that of a stepping stone
 - 4. Artificial atmosphere
 - 5. Too wide a variety of activities demanded

The reasons given by various department heads as impelling them to encourage men to accept outside positions are as follows:

- 1. No future for the man in teaching, even though he was competent
- 2. The man could not get along with students
- 3. The man could not get along with his associates
- 4. Poor teacher
- 5. Unfit for the organization

It is interesting to reflect what improvement in efficiency might be accomplished by approaching the problem in the same manner in which the employment managers have approached that of labor turnover. The employment manager considers:

- 1. The sources of supply and methods of securing new men
- 2. Methods of training and developing new men
- 3. Methods to be adopted to retain all promising men

Sources of Supply of Teachers

With regard to sources of supply for academic teachers these may be enumerated as:

- (a) Personal inquiries made by presidents, deans and department heads at educational and professional conventions. Joining various educational and professional associations has been frequently recommended to young instructors with the confidential statement that the conventions of such associations constitute quite an employment exchange. In fact in many of such conventions this by-product is more important than the main occasion, so far as many of the visitors are concerned.
- (b) The second source of supply is letters of inquiry, addressed to college professors asking nominations from their acquaintance-ship among alumni or instructors, and followed by personal interview.
- (c) The third source of supply is advertisement in educational, professional or trade journals, followed by correspondence and interviews.
- (d) The fourth source of supply is the teachers' or professional employment agencies.

While the cost of hiring an ordinary laborer in an industrial employment bureau may be as low as 50 cents to \$1.00 per man, it is evident that when we calculate the cost of the time, correspondence and traveling expenses of higher officials in educational work in filling a vacancy, the total is apt to run not much below \$50 per position to be filled.

METHODS AND STANDARDS OF SELECTION

After having considered the sources of supply, let us consider methods and standards of selection.

Professor H. Wade Hibbard, head of the Department of Mechanical Engineering at the University of Missouri, has listed 209 activities of a professor. He has boiled these down for a member of an engineering faculty to 84, as follows:

Teaching in
Lecture
Recitation
Laboratory
Drafting
Computation

Computation Field Work Seminary

Examinations on his own work

Class discipline

Friendship with students

Breadth of culture for professor, and

its encouragement for student

Research

For Professor For Students

Methods of student study Student engineering society

Inspection tours
Foreign lecture
Summer positions
Graduate positions

Alumni list

Employment bureau for alumni

Registration
Registration
Issuing stores
Issuing apparatus
Laboratory deposits
Control of student activities
City moral cleanliness

New apparatus

Needs
Choice
Markets
Installation
Regular supplies

Repairs
Repair shop
Inventory
Deterioration
Out-of-dateness
New library books
Use of library
Catalog library
High school
Standards

Curricula.

Engineering curricula and progress

Other engineering schools Relations with the profession

College catalog

College and department circulars Engineering experiment station

Engineering bulletins University extension By correspondence By centers

Summer school

Advertising and public sentiment

Student grades
Grading methods
Electives for engineers
Schedules for classes

Use for rooms Lighting plans

Supervision of teaching Improvement of teachers Employment of new teachers

Acquaintance with foreign teachers

Pedagogical progress

Work in engineering professional soci-

eties

Work in educational societies

Writing
Problems of
Buildings
Grounds
Janitors

Power house management

Problems of Heating Lighting Water service

Fire

Prevention
Extinguishment
Bookkeeping
Appropriations
Personal typewriting
Hektographing
Lantern operation

Various department heads will lay emphasis in varying stress on certain of these activities, and measure candidates' acceptability by their fitness as they see it in such of these activities as they deem most important. Some of the activities listed require an executive type of mind, some a promotive type, some an accounting type, some an analytical type, some a judicial type, some a generalizing, and some a detailist type of mind. Not only is the range of mental requirements so great that no single individual can meet them, but the temperamental variations are equally wide. Success in some of these activities demands a strong vital temperament; in others a quick, nervous, energetic temperament is required; others require a calm, phlegmatic temperament, and still others a sympathetic, emotional temperament.

Assuming that the candidate's mental equipment and temperament are satisfactory, he must still pass the tests of good build, pleasing address, individual personality, poise, readiness in speech and acceptability as a public speaker. The last named ability may have to vary from capacity for plain straightforward practical talks free from histrionic attempts and artifices so as to meet the demands of audiences composed of practical men in commerce or industry on the one hand, to a highly histrionic type, well versed in all the arts of sophistry to meet the requirements of so-called more cultured audiences.

Finally we must measure well the applicant's ability to develop interest and enthusiasm and to impart information in such a way that it is not merely a filling-in process, but also a drawing-out and developing of the student. This is more a process of prospecting than direct measurement, to apply a geologist's analogy. Still we can assume that when certain other elements exist which we can measure there is a likelihood of teaching ability being present.

As we look over our long list of activities, however, let us bear in mind the scarcity of the all-around man, if he exists at all. So long as our colleges have not adopted the principles of scientific management as they relate to functional control, we can at least apply them departmentally, since in most colleges the department head is the employment manager, his nominations being subject usually only to confirmation by higher officials. In a department numbering say ten men, it would be possible to assign a selection of eight or nine of Mr. Hibbard's functions outside of direct teaching

work to one man, giving each instructor in this way an opportunity to participate in some few of the multitude of extraneous duties which under traditional systems are handled wholly by department heads or other executives. In filling a vacancy we might then emphasize the traits requisite for the successful carrying on of the more limited line of activities.

Unquestionably a more careful selection based upon scientific analysis of the requirements of each position and applying some standards of measurement to candidates would result in a more efficient selection of candidates with a tendency to reduce the annual turnover.

DEVELOPMENT OF AN INSTRUCTION STAFF

Coming next to the question of development of employes, we find in progressive industrial centers and in large industrial corporations educational classes of salesmen, of accountants, of cost clerks, of time study men, of foremen and superintendents, of credit men, of traffic managers, etc., all engaged in studying the most recent literature and best information relating to their fields of work, the employing corporations for the most part meeting the expenses of securing lecturers and teachers for such classes. It would not be distinctly a new feature in educational practice to carry on this sort of training of instructors within the plant, and yet such practice is exceptional rather than the rule, as it should be. Educational traditions it is true prescribe a leave of absence of from one to three years to obtain a Ph.D. degree at some other educational institution. preferably in some foreign country. The financial expenditure involved in this procedure is such that only those who have private incomes, or are willing to suffer extreme privation for a number of years, are able to participate in this kind of development process. If the foremen's meetings or the cost accountants' club can be scheduled during work hours by factories, similar educational activities for the benefit of instructors can be scheduled as a regular procedure of colleges. Such training should aim to develop not only higher technical ability, but should consider the pedagogic methods and ideals of the individual subject, personal efficiency and fitness for the organization. In order to develop department heads. there should be a much wider extension of the practice of exchanging professors, accompanied by an extra stipend to cover the expenses of travel and change of location. The heads of professional or industrial departments should be encouraged to take a year's leave of absence to work at their profession or in industry for pay with the idea that they would return full of knowledge as to the latest professional and industrial practices.

RETENTION OF INSTRUCTORS

Having considered now the selection and development of instructors, let us consider the matter of retention. In industries and the professions, tabulated income curves show that the capable man's earnings increase steadily up to the age of sixty and even In college teaching a man usually reaches a professorship somewhere between the age of thirty and forty, and thereafter his income curve remains a horizontal line until his death. wonder therefore that we hear the term "blind alley" applied to the profession of college teaching. The remedy is self-evident. Boards of trustees of colleges should apply the same principles of compensation to their faculties as they would apply in industrial corporations of which they might be directors. Long tenure of office, accompanied by effective results, should be accompanied by periodic increases in salary even after professorial rank has been There are many department heads in colleges who see young men graduating under them whom they have been instrumental in placing not only in their first positions, but later into better positions, earning salaries in from five to ten years after graduation aggregating fifty or one hundred per cent higher than the professor's salary.

I have laid particular stress upon the case of the professor, because the subject of the underpaid instructor and assistant is already well known, while very few persons realize that the professor or department head is also underpaid and that this fact encourages the men of the instructor class to seek other fields. Moreover, increasing demands are being made of the professor for traveling expenses, to attend conventions, to make contributions to a variety of worthy causes and to maintain a social and professional "front." From my knowledge of existing industrial and professional conditions, I should say that as industrial salaries rule at present, no college assistant or instructor should be employed at a starting pay of less than \$1,200 for the academic year. In a first-class institution

he should have opportunity for regular annual advancement to a salary of \$1,800. As an assistant professor, his salary should be regularly increased for efficient service until it reaches \$3,000. In the associate professor's class, the range should be from \$3,000 to \$4,000. In the full professor's class, the range should be from \$4,000 upward, with assured advancement, until the income curves of department heads in educational work are parallel with those of department heads in industry or of professional men of equal accomplishments. If Europe can pay college professors \$10,000 a year, why not America?

HANDICAPS TO EFFICIENCY

Thus far I have discussed the question of assured prospects of promotion and adequate pay, which employment managers tell us are essential for retention of desirable employes. These same employment managers tell us also that we must provide agreeable working surroundings and conditions leading toward contentment and happiness. Several prominent industrial employment managers emphasize the importance of according freedom of speech and opinion to all men. The progressive department head in a college will heed this note as a sign of the times and encourage wider participation by all of his men in council which should be held to determine not only matters of policy and methods, but also such as relate to appointments.

Lack of the customary facilities provided in ordinary business and industrial practice for clerical, drafting and stenographic assistance is one of the conditions of academic inefficiency widely prevalent. In this respect, our colleges might well follow the example of corporation schools who do all they can to develop the real educational powers of their teachers by providing them all of the clerical, drafting and stenographic assistance needed. Academic traditions sanction the purchasing of a \$200 scientific instrument, used two or three times a year, as a necessity, while the purchase of a dictaphone to increase the efficiency of an instructor twenty per cent would be looked on as an unpardonable luxury.

Another condition affecting the efficiency of instructors is the lack of provisions for private study. A recent book on efficient living claims that the home life of college professors is made far from ideal by the necessity imposed on them of carrying the day's work

into the home and the maintenance of a private study—a sort of a sanctum sanctorum in the residence. Even this safe retreat may not exist if the family has happened to grow considerably in number. Rooms should be provided in college buildings in which instructors might secure genuine privacy for study purposes, being entirely free from business routine or interviews during such periods.

This discussion would not be complete without some mention of old age or retirement pensions. It has been argued that although such pensions might be entirely proper for teachers in primary and secondary schools, it would be letting down caste bars to admit that college professors really required such pensions. Andrew Carnegie intimated that while he would take care of certain institutions, he considered it the duty of the states to take care of the matter of pensions in state institutions. There does not seem to be any valid reason why a railway conductor, engineer or fireman should be entitled to an old age pension any more than a college professor.

I have endeavored to list such analogies between industrial and academic conditions relating to turnover as present themselves to a man who has come into academic work after having filled a position as factory superintendent and production manager.